CASSETTE CAR STEREO
WITH FM/AM ELECTRONIC TUNER

SUPER TUNER

OWNER'S MANUAL

Thank you for purchasing this PIONEER product. Before attempting operation, be sure to read this manual.

Nous vous remercions d'avoir acheté cet appareil PIONEER. Avant de l'utiliser, prendre soin de lire ce manuel.

Muchas gracias por la adquisición de este producto PIONEER. Antes de tratar de operarlo, lea atentamente este manual.

شكرا لك على شرائك جهاز بايونير هذا. قبل محاولة تشغيله تأكد من قراءة هذا الدليل.

KE-3070QR

PIONEER®

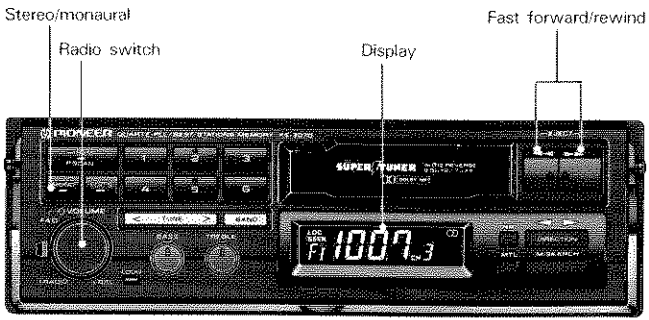
KE-3070QR
KE-3040

Features

- Built-in highly sensitive "Super Tuner" for automatic control of stereo separation, muting, and frequency characteristics to match the strength of the FM signal.
- The Best Stations Memory automatically memorizes the six best (strongest) stations in the six preset buttons in the order of their strength.
- Preset scan tuning for sequential recall of preset frequencies.
- For AM reception, a tuning step is switchable to the other according to the zonal frequency range.
- Music search function allows automatic playback from the beginning of the selection being played or the beginning of the next selection.
  (This feature is provided for the KE-3070QR.)
- Built-in Dolby NR for reduced tape hiss.
  (This feature is provided for the KE-3070QR.)
- "Key-off pinch roller release" function automatically releases the pinch roller when the vehicle's ignition is switched off.
  (This feature is provided for the KE-3070QR.)
- 4-speaker system creates a full-bodied listening environment.
- The "Quick Release Mounting Bracket", facilitates mounting and dismounting of the car stereo and serves to protect the unit from theft.
  (This feature is provided for the KE-3070QR.)

- Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
  "DOLBY" and the double-D symbol ◻◻ are trademarks of Dolby Laboratories Licensing Corporation.

Switching the Tuning Steps



KE-3070QR

• Changing the tuning step

The tuning steps of the AM band for this unit can be switched between 9 kHz and 10 kHz per step. The tuning step should be switched from 9 kHz (which is preset at the factory) to 10 kHz when this unit is used in North America, Central America, or South America.

1. Simultaneously press the fast forward and rewind buttons to eject the cassette, and use the radio switch to switch power OFF.

2. The AM band tuning step is changed by pressing the radio switch while holding down the stereo/monaural switch. It should be noted that changing the tuning step also deletes frequencies stored in the tuning memories.

KE-3040

- Changing the vehicle's battery sets the tuning steps and frequency range settings to their initial setting.

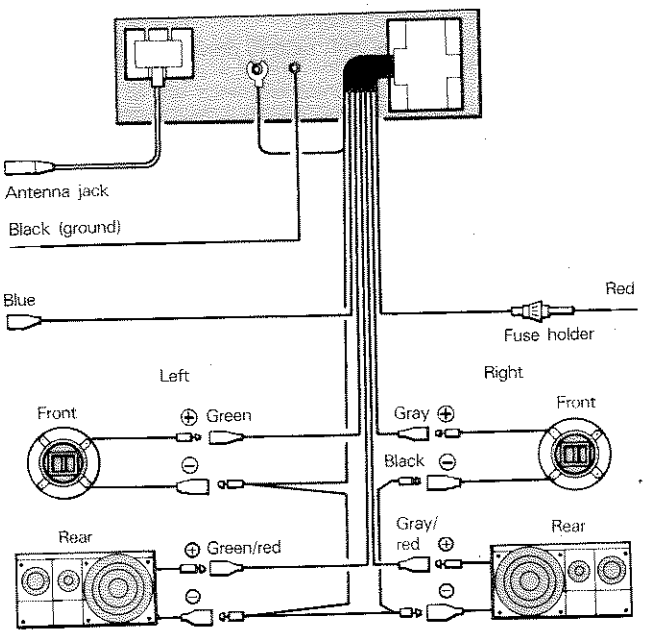
	Specification	Initial Setting	New Setting
AM	Tuning steps	9 kHz steps	10 kHz steps
	Frequency range	531 – 1,602 kHz	530 – 1,620 kHz

Note:

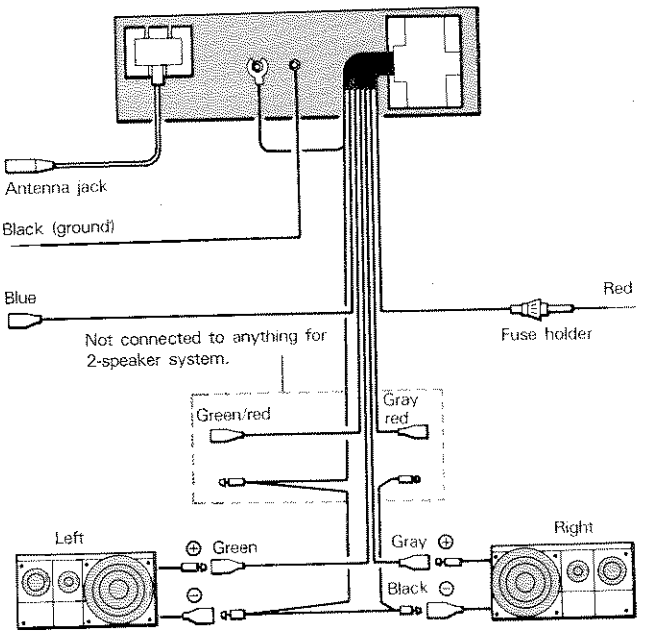
- To avoid shorts in the electrical system, be sure to disconnect the battery ⊖ cable before beginning installation.
- Replace fuses only with the types stipulated on the fuse holder.
- Be sure to properly connect the color coded leads. Failure to do so can cause malfunctions.
- Cover unused terminals with tape to prevent electrical shorts.

Black (ground)	To vehicle (metal) body.
Blue (KE-3070QR) **Blue/white (KE-3040)**	To auto-antenna power terminal (Max. 300 mA 12 V DC).
Red	To electric terminal controlled by ignition switch (12 V DC) ON/OFF.
Orange	To terminal always supplied with power regardless of ignition switch position. • This lead is included with the KE-3040.

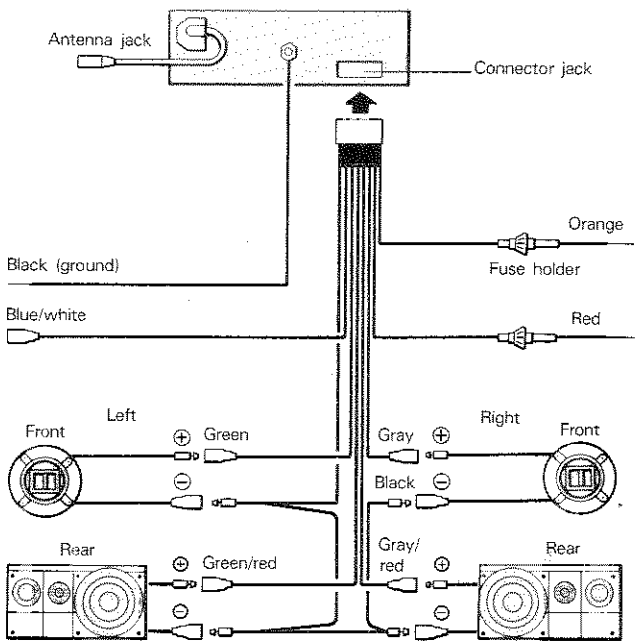
KE-3070QR
4-speaker system



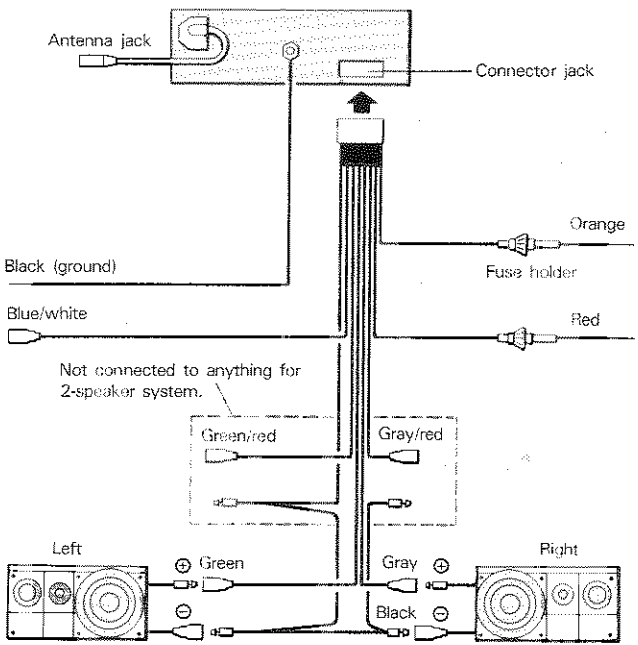
2-speaker system



KE-3040
4-speaker system



2-speaker system



Installation

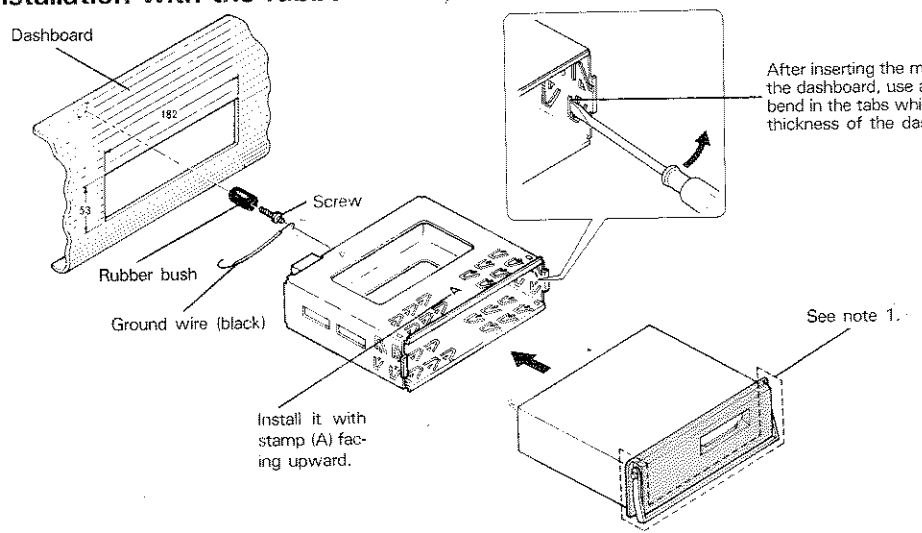
Note:

- Use only the parts included with the unit to ensure proper installation. The use of unauthorized parts can cause malfunctions.
- Consult with your nearest dealer if installation requires the drilling of holes or other modifications of the vehicle.
- If installation angle exceeds 30° from horizontal, the unit might not give its optimum performance. (Fig. 1)

KE-3070QR

- Before removing this unit from your vehicle, be sure to remove cassette tapes and make sure that radio power is switched OFF.

Installation with the rubber bush (KE-3070QR)


Dashboard
182
53
Screw
Rubber bush
Ground wire (black)
Install it with stamp (A) facing upward.
See note 1.
After inserting the mounting bracket into the dashboard, use a flat screw-driver to bend in the tabs which correspond to the thickness of the dashboard.

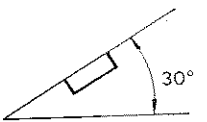
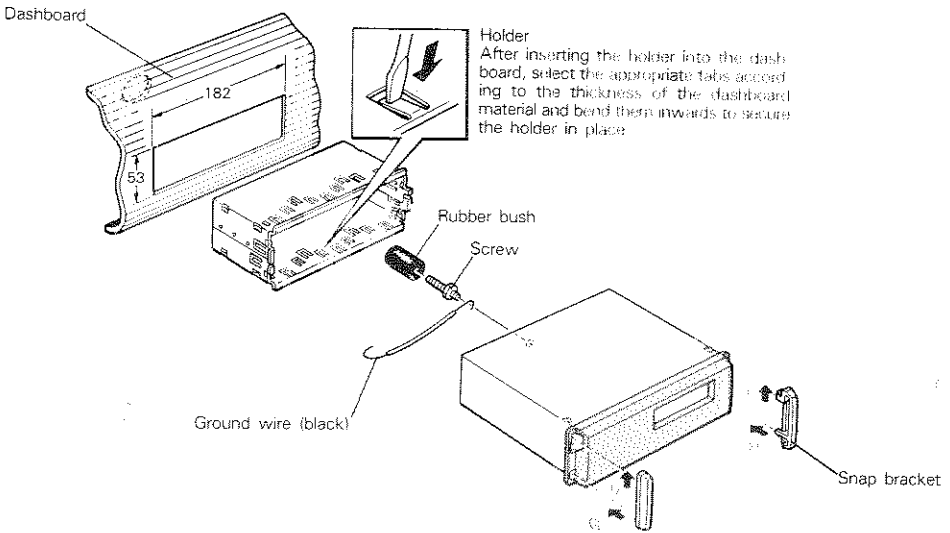
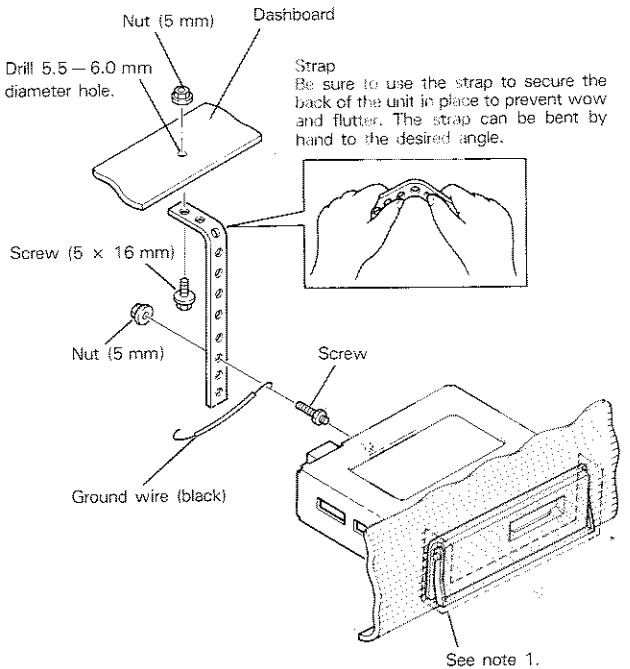


Fig 1

Installation with the rubber bush (KE-3040)


Dashboard
182
53
Holder
After inserting the holder into the dashboard, select the appropriate tabs according to the thickness of the dashboard material and bend them inwards to secure the holder in place.
Rubber bush
Screw
Ground wire (black)
Snap bracket

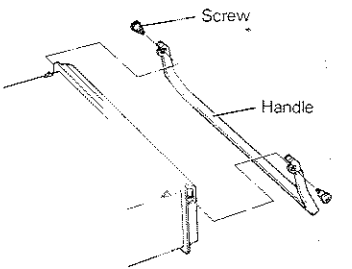
Installation without the rubber bush (KE-3070QR)


Nut (5 mm)
Dashboard
Drill 5.5 – 6.0 mm diameter hole.
Strap
Be sure to use the strap to secure the back of the unit in place to prevent wow and flutter. The strap can be bent by hand to the desired angle.
Screw (5 × 16 mm)
Nut (5 mm)
Screw
Ground wire (black)
See note 1.

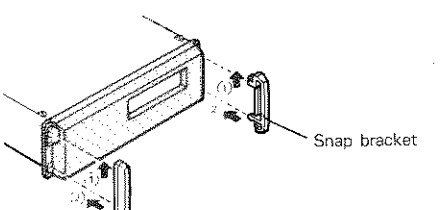
Note 1

- When not using the quick release function.

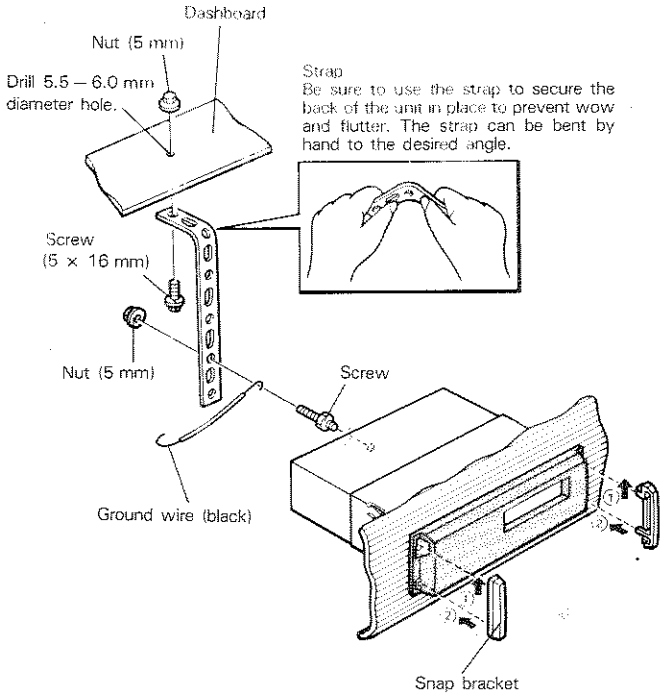
1. Remove the handle.



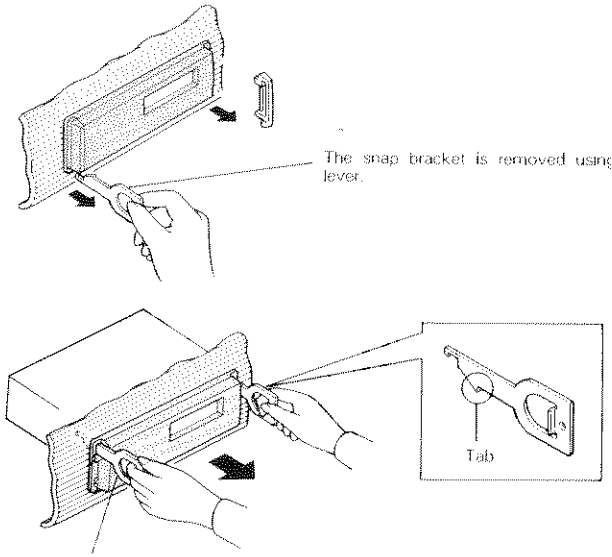
2. Attach the snap brackets.



Installation without the rubber bush (KE-3040)


Dashboard
Nut (5 mm)
Drill 5.5 – 6.0 mm diameter hole.
Strap
Be sure to use the strap to secure the back of the unit in place to prevent wow and flutter. The strap can be bent by hand to the desired angle.
Screw (5 × 16 mm)
Nut (5 mm)
Screw
Ground wire (black)
Snap bracket

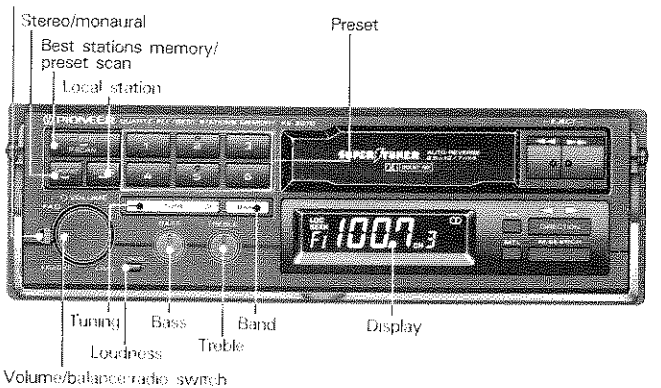
Removing a unit equipped with a snap bracket



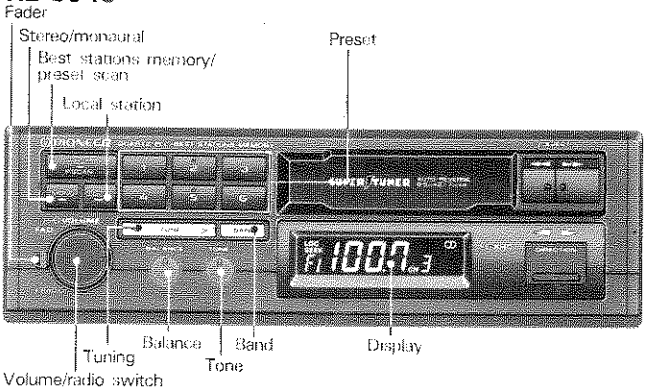
Lever
Position the accessory levers with the tabs lower. Insert the levers into the slots on both sides of the unit until they lock into place. Pulling off the levers makes it possible to remove the unit from the dashboard.

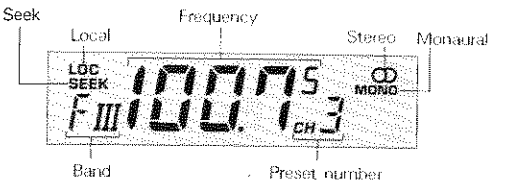
Using the Radio

KE-3070QR



KE-3040





- **Before attempting operation...**
- Reduce the volume by turning the volume control knob to the left.
- Set the fader control to the left horizontal.

1. Press the radio switch to turn on power and display the frequency.
2. Press the band switch to select the band.
3. Press both ends of tuning button and the seek tuning indicator will appear on the display.
4. Press either the left or right side of the tuning button to tune in the desired frequency. (Pressing the right side will increase the frequency.)
5. Adjust the volume and balance.
   KE-3070QR
   To adjust the balance, first pull the knob until a click is heard. After setting to the desired level, push the knob in again to its original position.
6. Adjust the tone.

• To enter a frequency into the preset memory...

7. Hold down one of the preset buttons (1-6) for approximately two seconds. The frequency is stored in memory (assigned to the preset button pressed) once the preset number stops flashing on the display.
   Six FM1 frequencies, six FM2 frequencies, six FM3 frequencies and six AM frequencies can be entered.

• Best Stations Memory Button

Automatically tunes strong frequencies and assigns them to preset buttons 1 through 6 for one-touch automatic tuning. The best stations memory function is activated by pressing this button for approximately 2 seconds. The best stations memory function is indicated by — -- — flashing on the display, and this function can be canceled by pressing the band switch. The frequency display returns once the best stations memory function is complete. The frequency displayed at this time is of the strongest station assigned to preset button 1 by the best stations memory function.

- 6 best (strongest) frequencies are memorized in the 6 preset buttons in the order of their strength, the strongest on being assigned to preset button 1.
- The frequencies previously assigned to the preset buttons are retained when 6 frequencies cannot be located.
- The best stations memory is in operation while — — -- is flashing on the display.

• Stereo/Monaural Switch

This switch is used to change from stereo to monaural for FM broadcasts, and is usually left in the stereo position. When a stereo broadcast is received, the stereo indicator will illuminate. With the "Super Tuner" function, stereo broadcasts can always be enjoyed in their optimal reception mode. If excessive noise is present, pressing this switch allows monaural reception of the broadcast.

• Local Station Switch

Pressing this switch increases the seek threshold level so that only relatively strong stations can be tuned in (local indicator will illuminate on the display). Local seek threshold level can be selected among four levels for FM and two levels for AM. Holding this switch down for approximately 2 seconds and then pressing the right side of the tuning button changes the display from L-1, L-2, L-3 to L-4. Pressing the left side of the tuning button changes the display from L-4, L-3, L-2 to L-1 (L-1 and L-2 for AM). The bigger the number, the higher the seek threshold becomes and only relatively strong stations can be tuned in.

• Fader Control

This control is used to adjust the balance between the front and rear speakers when using a 4-speaker system. Turning the control upwards decreases the volume of the rear speakers, while turning it downwards decreases the volume of the front speakers. With 2-speaker systems, set this control to a horizontal position.

• Loudness Switch (KE-3070QR)

When playing back a tape or listening to the radio at low volume, the low and high tones are emphasized and more clearly heard by pressing this switch.

• Auto-Loudness (KE-3040)

When playing back a tape or listening to the radio at low volume, the low tone is automatically emphasized.

Seek Tuning

Press both ends of tuning button, and tuning to the next higher or lower broadcast on the band can be accomplished automatically by simply pressing either the right or left side of the tuning button. FM frequencies change in 50 kHz steps while those in the AM bands change in 9 kHz steps.

- AM frequencies are tuned in 10 kHz steps after the tuning steps are changed.

Preset Scan Tuning

Pressing the preset scan button (CH indicator flashes) causes previously stored frequencies to be tuned in sequentially for eight seconds each. Press again when the desired frequency is tuned in to cancel preset scan tuning.

Preset Tuning

Pressing the preset button instantly tunes in the frequency programmed in the memory for that button.

Manual Tuning

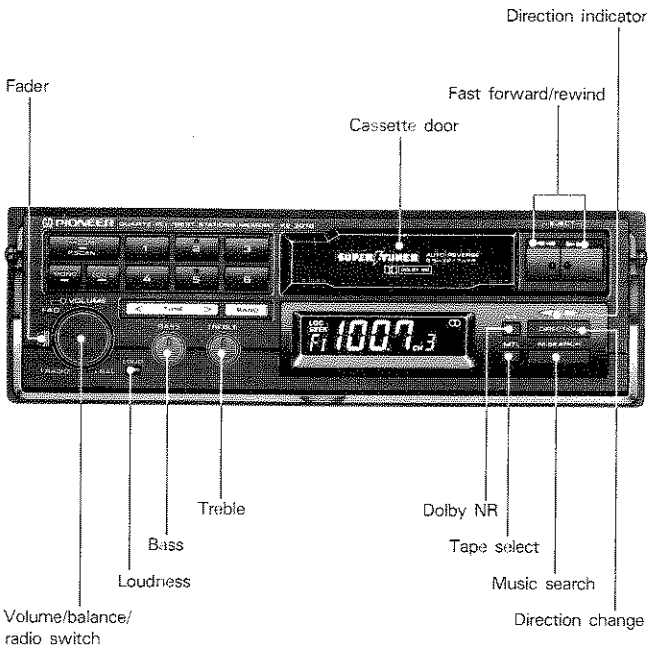
When manual tuning is employed, FM frequencies change in 50 kHz steps while AM frequencies change in 9 kHz steps.

- AM frequencies are tuned in 10 kHz steps after the tuning steps are changed.

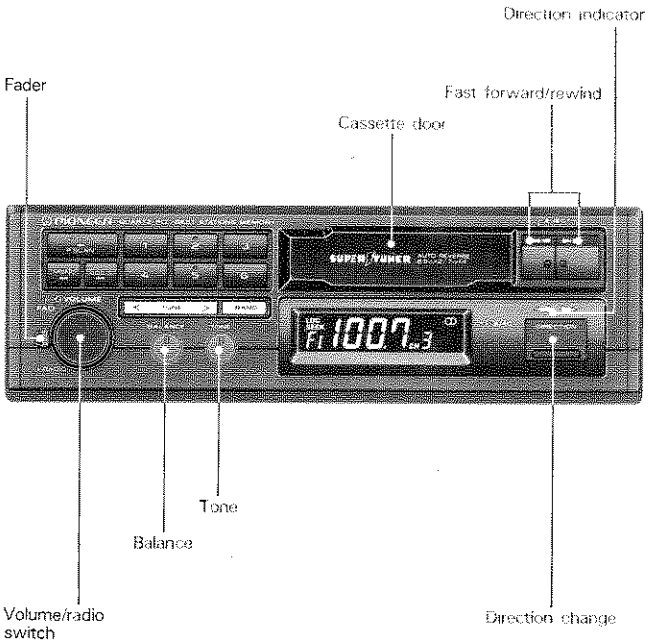
1. Press both ends of tuning button and the seek tuning indicator will disappear from the display.
2. Change the frequency by pressing either the left or right side of the tuning button. Pressing the button once will change the frequency one step (see above). Continuously depressing either side of the button will successively change the frequency at the prescribed step.

Using the Tape Deck

KE-3070QR



KE-3040



• Before attempting operation...

- Reduce the volume by turning the volume control knob to the left.
- Set the fader control to the left horizontal.

1. Insert a tape into the deck to turn the power on and automatically begin playback. Even if the radio is on, the unit will automatically switch to and begin tape playback.
2. Adjust the volume and balance.
   KE-3070QR
   To adjust the balance, first pull the knob until a click is heard. After setting to the desired level, push the knob in again to its original position.
3. Adjust the tone.
4. When tape playback reaches the end of the tape, playback will automatically switch from the side being played to the opposite side (ie. Side A to Side B or vice versa) (Auto-reverse). To eject the tape during playback, simultaneously press the fast forward and rewind buttons.

- A loose or warped label on a cassette tape may interfere with the eject mechanism of the unit or cause the cassette to become jammed in the unit. Avoid using such tapes or remove such labels from the cassette before attempting use.
- Do not try to eject the cassette immediately after insertion, as it will cause malfunction. Wait a few seconds.

KE-3040

- Be sure to eject the tape when the vehicle's ignition is turned OFF. Leaving the tape in the unit can deform the pinch roller causing wow and flutter during tape playback.

• Fast Forward/Rewind

Since the transport can be in either direction, both the left and right high-speed tape transport buttons can be regarded as fast forward/rewind buttons.
For fast forward, press the high-speed tape transport button that corresponds to the direction that is shown by the direction indicator. When the end of the tape is reached, playback will automatically begin from the opposite side of the tape (Auto-reverse).
For rewind, press the button that is opposite that of the direction shown by the direction indicator. When the end of the tape is reached, playback will automatically begin from the beginning of the same side of the tape (Auto-replay).
Fast forward and rewind can be terminated by pressing the respective opposite high-speed tape transport button.

• Direction Change Button

This button is used to switch from one side of the tape to the other (from Side A to Side B or vice versa).

• Tape Select Switch (KE-3070QR)

This switch is used to switch to the proper mode for the tape being used and should be depressed when using chrome or metal tapes.

• Dolby NR Switch (KE-3070QR)

Press when playing a tape recorded with Dolby NR.

Music Search (KE-3070QR)

• Returning to the beginning of selection A

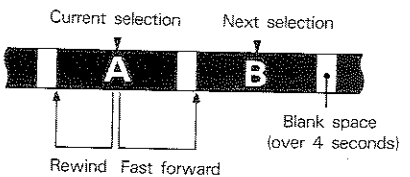
Press the music search button and then the high-speed tape transport button for the direction opposite that shown by the direction indicator. Playback will automatically start from the beginning of selection A.

• Moving from selection A to selection B

Press the music search button and then the high-speed tape transport button that corresponds to the direction shown by the direction indicator. Playback will automatically start from the beginning of selection B.

To enable regular fast forward/rewind operations, press the music search button again to turn the function OFF. The following errors will cause the music search function to operate improperly, even though the unit is not malfunctioning.

- Unrecorded "blank" portions between selections is less than 4 seconds → the blank portion cannot be detected by the unit.
- Pauses in recorded conversations are longer than 4 seconds → the unit reads these as blanks between selections.
- Portions are recorded at very low volume for more than 4 seconds → the unit reads these as blanks between selections.



- Do not use tapes longer than C-90-type (90 min.) cassettes. Longer tapes can interfere with tape transport.
- If the playback head becomes dirty, sound quality will suffer. Periodically (once or twice a month) clean the heads with a cotton swab soaked with alcohol. (Fig. 1)
- Storing cassettes in areas directly exposed to sunlight or high temperatures can distort them and subsequently interfere with tape transport. (Fig. 2)
- Store unused tapes in a tape case where there is no danger of them becoming loose or being exposed to dust.
- If the car's battery is disconnected for any reason the preset memory will be erased and must be reprogrammed after reconnection of the battery. (KE-3040)

• After Service

In the event this unit does not function properly, contact your dealer or the nearest authorized PIONEER Service Center.

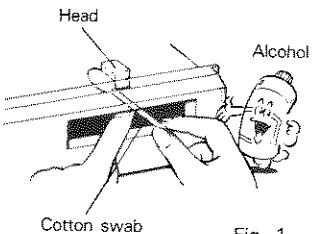


Fig. 1

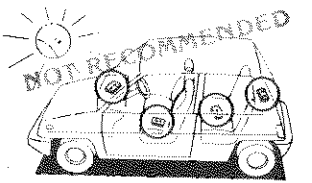


Fig. 2

Specifications

General

Power source . . . . . 14.4 V DC (10.8 – 15.6 V allowable)
Grounding system . . . . . Negative type
Max. current consumption . . . . . 2.5 A
Dimensions (chassis) . . . . . 178(W) × 50(H) × 150(D) mm
(nose) . . . . . 188(W) × 58(H) × 10(D) mm
Weight . . . . . 1.3 kg

Amplifier

Maximum power output . . . . . 8.5 W × 2/7 W × 4 (EIAJ)
Continuous power output . . . . . 4.5 W × 2/3.5 W × 4 (1% dist. at 1 kHz)
Load impedance . . . . . 4 Ω (4 – 8 Ω allowable)
Tone controls (KE-3070QR)
(bass) . . . . . ±10 dB (100 Hz)
(treble) . . . . . ±10 dB (10 kHz)
Loudness contour
(KE-3070QR) . . . . . +12 dB (100 Hz), +7 dB (10 kHz) (volume: −30 dB)
(KE-3040) . . . . . +8 dB (100 Hz) (volume: −30 dB)

Tape player

Tape . . . . . Compact cassette tape (C-30 – C-90)
Tape speed . . . . . 4.8 cm/sec.
Fast forward/rewind time . . . . . Approx. 100 sec. for C-60
Wow & flutter . . . . . 0.13% (WRMS)
Frequency response
(KE-3070QR) . . . . . Metal: 50 – 17,000 Hz (±3 dB)
Normal: 50 – 14,000 Hz (±3 dB)
(KE-3040) . . . . . 50 – 14,000 Hz (±3 dB)
Stereo separation . . . . . 45 dB
Signal-to-noise ratio
(KE-3070QR) . . . . . Dolby NR IN: 60 dB (IEC-A network)
Dolby NR OUT: 52 dB (IEC-A network)
(KE-3040) . . . . . 52 dB (IEC-A network)

FM tuner

Frequency range . . . . . 87.5 – 108 MHz
Usable sensitivity . . . . . 12 dBf (1.1 μV/75 Ω, mono)
50 dB quieting sensitivity . . . . . 17 dBf (1.9 μV/75 Ω, mono)
Signal-to-noise ratio . . . . . 70 dB (IEC-A network)
Distortion . . . . . 0.3% (at 65 dBf, 1 kHz, stereo)
Frequency response . . . . . 50 – 15,000 Hz (±3 dB)
Stereo separation . . . . . 40 dB (at 65 dBf, 1 kHz)

AM tuner

Frequency range (9 kHz channel step) . . . . 531 – 1,602 kHz
(10 kHz channel step) . . . 530 – 1,620 kHz
Usable sensitivity . . . . . 18 μV (25 dB) (S/N: 20 dB)
Selectivity . . . . . 50 dB (±9 kHz)

Note:

Specifications and the design are subject to possible modification without notice due to improvements.

PIONEER ELECTRONIC CORPORATION

<88E02EOM01>

<CRD1220-A>ES